Method for Target Detection and Identification by Using Proximity Pixel Information

Abstract of Disclosure

5   An efficient approach to exploit hyperspectral imagery and detect target of interest is disclosed. This approach uses proximity pixels as reference signatures to detect potential discontinuity that represents material of unknown existing on the terrain. By incorporating signature of a chosen material of interest, this approach provides an effective way for target detection and identification. An evolutionary algorithm is employed to estimate the abundance of material of interest.